

TRAITÉ DE COOPÉRATION EN MATIÈRE DE BREVETS

PCT

RAPPORT PRÉLIMINAIRE INTERNATIONAL SUR LA BREVETABILITÉ (chapitre I du Traité de coopération en matière de brevets)

(règle 44bis du PCT)

Référence du dossier du déposant ou du mandataire BB03 ANT B28	POUR SUITE À DONNER Voir le point 4 ci-dessous	
Demande internationale no. PCT/FR2004/002935	Date du dépôt international (<i>jour/mois/année</i>) 18 November 2004 (18.11.2004)	Date de priorité (<i>jour/mois/année</i>) 18 November 2003 (18.11.2003)
Classification internationale des brevets (8 ^e édition, sauf indication d'une #dition ant#rieure) Voir les informations pertinentes dans le formulaire PCT/ISA/237		
Déposant ANTONOV AUTOMOTIVE TECHNOLOGIES B.V.		

1. Le présent rapport préliminaire international sur la brevetabilité (chapitre I) est établi par le Bureau international au nom de l'administration chargée de la recherche internationale selon la règle 44bis.1.a).

2. Ce RAPPORT comprend un total de 7 feuilles, y compris la présente feuille de couverture.

Dans les feuilles jointes, toute référence à l'opinion écrite de l'administration chargée de la recherche internationale doit être entendue, à la place, comme une référence au rapport préliminaire international sur la brevetabilité (chapitre I).

3. Le présent rapport contient des indications relatives aux points suivants :

- | | | |
|-------------------------------------|---------------|---|
| <input checked="" type="checkbox"/> | Cadre n° I | Base de l'opinion |
| <input type="checkbox"/> | Cadre n° II | Priorité |
| <input type="checkbox"/> | Cadre n° III | Absence de formulation d'opinion quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle |
| <input type="checkbox"/> | Cadre n° IV | Absence d'unité de l'invention |
| <input checked="" type="checkbox"/> | Cadre n° V | Déclaration motivée selon l'article 35.2) quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration |
| <input type="checkbox"/> | Cadre n° VI | Certains documents cités |
| <input type="checkbox"/> | Cadre n° VII | Certaines irrégularités relevées dans la demande internationale |
| <input type="checkbox"/> | Cadre n° VIII | Certaines observations relatives à la demande internationale |

4. Le Bureau international communiquera le présent rapport aux offices désignés conformément aux règles 44bis.3.c) et 93bis.1 mais pas avant l'expiration du délai de 30 mois à compter de la date de priorité (règle 44bis.2), sauf si le déposant a présenté une requête expresse à cet égard en vertu de l'article 23.2).

Date d'établissement du présent rapport 29 August 2006 (29.08.2006)	
Bureau international de l'OMPI 34, chemin des Colombettes 1211 Geneva 20, Switzerland no de télécopieur +41 22 338 82 70	Fonctionnaire autorisé Beate Giffo-Schmitt e-mail: pt03@wipo.int

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

TRANSLATION
PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year) **See form PCT/ISA/210**

Applicant's or agent's file reference

BB03 ANT B28

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/FR2004/002935

International filing date (day/month/year)

18.11.2004

Priority date (day/month/year)

18.11.2003

International Patent Classification (IPC) or both national classification and IPC

F16H3/00

Applicant

ANTONOV AUTOMOTIVE TECHNOLOGIES B.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/FR2004/002935

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

International application No.
PCT/FR2004/002935

Form PCT/ISA/237 (Box No. V) (January 2004)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/FR2004/002935

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

connecting an engine to a load such as a motor vehicle, comprising

- an upstream shaft (20),
- a downstream shaft (40),
- interconnected by at least two power trains (14, 16, 18) of which at least one defines at least two transmission ratios, the ratios being different from one train to the other between the upstream shaft and the downstream shaft,
- on each power train, means for selective activation (comprising respectively a clutch 24, 44, 64 and a synchronizer 34, 48, 68) for bringing about each given ratio (synchronizer-type coupling elements 34, 48, 68) and for deactivating in terms of power transmission (clutch 24, 44, 64) the at least one train other than that defining said given ratio,
- the connection between the upstream shaft (20) and a respective input means (22, 42, 62) of each of the power trains being permanent, and
- the selective activation means being of a progressive type (clutch 24, 44, 64) and capable of adapting the speed of the engine and the speed of the load.

3 DEPENDENT CLAIMS 3-9, 12-14

The claims do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/FR2004/002935

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

in respect of novelty and inventive step (PCT
Article 33(2) and (3)).

The features of claims 3 to 9 and 14 are known
from D1:

Claim 3: each planetary gear train is associated
with 1 brake 12.

Claim 4: each train is independent and comprises
an output element (36, 58, 76) connected to the
output shaft (40).

Claim 5: the two trains 14 and 18 are essentially
identical locally but allow different ratios to be
achieved (2nd and 5th for 14; 6th and 3rd for 18)

Claim 6: each power train comprises a local direct
drive ratio (see paragraph 30).

Claim 7: the neutral state of each train is
brought about by opening the corresponding clutch
or by a neutral position of each synchronization
system (see paragraph 30).

Claims 8 and 9: the trains each comprise a
planetary gear train (26, 46, 66) mounted in
parallel.

Claim 14: see D1, claim 10.

The features of claims 11 and 12 are known in the
field of automatic gearboxes (see respectively D4,
figure 1, and D5, figure 2) and therefore do not
appear to be inventive in nature.

4 DEPENDENT CLAIMS 2, 10 and 11

The combination of characteristics of claims 2, 10
and 11 is not contained in the prior art and does

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/FR2004/002935

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

not follow from it in an obvious way for the
following reasons:

claim 2 specifies that the selective activation means are oil-cooled multi-disc friction clutch means. In the device of D1, the selective activation means are a combination of synchronization system and friction clutch means. In particular, the friction clutch means of D1 (clutch 24, 44, 64) do not make it possible to bring about each given ratio on a power train. The exclusive use of friction clutch means for producing different ratios of a planetary gear train box is known in particular from D2 or D3, but the devices of these documents differ from that of the invention in that the different power trains are always engaged, one aim of these devices being to distribute the torque on two parallel trains.

The features of claims 10 and 11 relate in detail to the structure of the power trains. Such details are neither known from nor suggested by the available prior art.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference A/PFE 318	FOR FURTHER ACTION	See item 4 below
International application No. PCT/EP2004/013357	International filing date (<i>day/month/year</i>) 25 November 2004 (25.11.2004)	Priority date (<i>day/month/year</i>) 05 December 2003 (05.12.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant CIBA SPEZIALITÄTENCHEMIE PFERSEE GMBH		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).																								
2.	This REPORT consists of a total of 6 sheets, including this cover sheet. In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 740 14 35	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Date of issuance of this report 07 June 2006 (07.06.2006)</td> </tr> <tr> <td style="padding: 2px;">Authorized officer Agnes Wittmann-Regis</td> </tr> <tr> <td style="padding: 2px;">Telephone No. +41 22 338 89 70</td> </tr> </table>	Date of issuance of this report 07 June 2006 (07.06.2006)	Authorized officer Agnes Wittmann-Regis	Telephone No. +41 22 338 89 70
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